2nd AF

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANT	:	Yingwei Chen et al.			
SERIAL NO.	:	10/082,859	EXAMINER	:	Anand Shashikant Rao
FILED	:	October 19, 2001	ART UNIT	:	2613
FOR	:	METHOD AND SYSTEM FOR SKIPPING DECODING OF OVERLAID AREAS OF VIDEO			

APPEAL BRIEF TRANSMITTAL LETTER

Mail Stop Appeal Brief-Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, VA. 22313-1450

Dear Sir:

Appellants respectfully submit three copies of an Appeal Brief For Appellants that includes an Appendix with the pending claims. The Appeal Brief is now due on September 15, 2005.

Appellants enclose a check in the amount of $500.00 covering the requisite Government Fee.

Should the Examiner deem that there are any issues which may be best resolved by telephone communication, kindly telephone Applicants undersigned representative at the number listed below.

Respectfully submitted,
Dan Piotrowski
Registration No. 42,079

By: Steve Cha
Attorney for Applicant
Registration No. 44,069

Date: September 15, 2005

Mail all correspondence to:
Dan Piotrowski, Registration No. 42,079
US PHILIPS CORPORATION
P.O. Box 3001
Briarcliff Manor, NY 10510-8001
Phone: (914) 333-9608
Fax: (914) 332-0615

Certificate of Mailing Under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to MAIL STOP APPEAL BRIEF-PATENTS, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA. 22313 on September 15, 2005.

Steve Cha, Reg. No. 44,069
(Name of Registered Rep.)

(Signature and Date)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Before the Board of Patent Appeals and Interferences

In re the Application

Inventor	**:**	**Yingwei Chen et al.**
Application No.	**:**	**10/082,859**
Filed	**:**	**October 19, 2001**
For	**:**	**METHOD AND SYSTEM FOR SKIPPING DECODING OR OVERLAID AREAS OF VIDEO**

APPEAL BRIEF

On Appeal from Group Art Unit 2613

Dan Piotrowski
Registration No. 42,079

Date: September 15, 2005

By: Steve Cha
Attorney for Applicant
Registration No. 44,069

Certificate of Mailing Under 37 CFR 1.8

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to MAIL STOP APPEAL BRIEF-PATENT, COMMISSIONER FOR PATENTS, P.O. BOX 1450, ALEXANDRIA, VA. 22313 on September 15, 2005.

Steve Cha, Reg. No. 44,069
(Name of Registered Rep.)

(Signature and Date)

TABLE OF CONTENTS

I. REAL PARTY IN INTEREST

The real party in interest is the assignee of the present application, Koninklijke Philips Electronics, and not the party named in the above caption.

II. RELATED APPEALS AND INTERFERENCES

With regard to identifying by number and filing date all other appeals or interferences known to Appellant which will directly effect or be directly affected by or have a bearing on the Board's decision in this appeal, Appellant is not aware of any such appeals or interferences.

III. STATUS OF CLAIMS

An amendment after final rejection is being filed simultaneously with the instant appeal brief. Claims 2-8, 10, 15-18, 21 and 22 have been presented for examination. All of these claims are pending, stand finally rejected, and form the subject matter of the present appeal. Of these claims, claims 5, 7, 8, 16 and 18 are original, and the rest are currently amended. Claims 1, 9, 11-14, 19, 20, 23 and 24 are canceled.

IV. STATUS OF AMENDMENTS

The Amendment after the Final Office Action filed July 18, 2005 has not been entered.

Although the public Patent Application Information Retrieval (PAIR) system indicates that an Advisory Action to the July 18, 2005 Amendment After Final was submitted yesterday and mailed today, September 15, 2005, content of the Advisory Action is not displayable in public PAIR. A phone message was left for the Examiner

today regarding whether or not the July 18th amendment has been entered, but the applicants have not yet heard from the Examiner. The applicants therefore proceed under the assumption that the July 18th amendment has not been entered. The applicants further assume that the amendment filed simultaneously with this appeal brief is entered, because the only revisions in the amendment are a) canceling some claims; and b) redrafting some dependent claims into independent form.

V. SUMMARY OF CLAIMED SUBJECT MATTER

The present invention relates to reducing the computational complexity of a video decoder if the video has an overlay area. An example of an overlay area is a picture-in-picture. Thus, for instance, a smaller included window on the television or multimedia screen might be showing the program of a different channel. The main program being shown has some video content that has been replaced, for display purposes, by the smaller window. For the replaced content, which the viewer never sees due to the overlaid window, it would be desirable to forego the processing overhead of the decoding that would otherwise be necessary to deliver the content for display.

A complicating factor is the temporal interdependence of the encoded video arriving at the television, in combination with the fact that movement of the video picture is represented based on previously transmitted video. To reduce the overall amount of information in transit, some video snapshots in time or "frames" are sent as merely a difference in content from a previously sent frame. That previous frame is called a reference frame. A portion of the reference frame may essentially match a corresponding portion of the current frame. The two may differ, for example, by a mere slight

translation, because of intervening movement that has occurred in some object being displayed in the video. By sending merely the difference, in overall video content, from the reference frame, and in addition an indicator of direction and magnitude of movement, an overall reduction in data transmission can be realized. However, for example, an object in the overlaid area of the reference frame, and therefore not displayed, may move out of the overlaid area in a subsequent frame. If decoding of that subsequent frame depends of decoding of the reference frame, at least part of the overlaid area of the reference frame will have to be decoded. In particular, at the part of the overlaid area that serves as a reference for video now visible on-screen would have to have been decoded, rather than skipped. This is the case, despite the fact that, at the time the reference frame was displayed, no decoding of the overlaid area was needed. Thus, this is one example of how part of an overlaid area currently in the video might, though not displayed, have to be decoded.

The present invention is directed to distinguishing situations in which the decoding in an overlaid area, or in part of the overlaid area, can be skipped.

In one aspect of the present invention, an optimization system for processing encoded video data includes a frame analysis system 12 that determines if a current video frame having an overlaid area 36 acts as a reference for future video frames (page 5, lines 22-24).

The optimization system includes a system 13 for identifying a skippable region 40 in the overlaid area. In particular, the frame analysis system examines a picture type of the current video frame. If the current video frame is a B frame, the frame depends on other reference frames but does not serve as a reference for any frame. Since no other

frame would be compromised in its decoding if the B frame was not decoded, the identification system identifies the entire overlaid area of the B frame as the skippable region (page 5, lines 6-9, 14-15).

In another aspect, the frame analysis system examines a sequence of video frames, and the identification system identifies the entire overlaid area as the skippable region if none of the sequence of video frames acts as reference frames. This situation can arise, for example, when each frame is encoded independently, foregoing the efficiency otherwise realizable by differencing content to be transmitted to the decoder (page 5, line 16: "Standalone I").

In a further aspect, a motion vector analysis system calculates a motion vector range for the current video frame. The range can be two-dimensional so as to define a boundary within the current overlaid area defining a portion (FIG. 3, rectangle (x1,y1), (x2,y2)) within the overlaid area that is unaffected by object motion reflected in a subsequent frame that uses the current frame as a reference. In this sense, the skippable region can be regarded as the overlaid area less an area defined by the calculated motion vector range (page 6, line 20 - page 7, line 5).

In an additional aspect, as a technique alternative to the motion vector range technique, a motion vector analysis system examines motion vectors in a predicted frame that references the current video frame in order to identify prediction macroblocks in the overlaid area of the current frame. In particular, the prediction macroblocks could not be skipped, since the predicted frame's decoding depends upon the decoding of the prediction macroblocks. Thus, the skippable region is identified as the overlaid area less the identified prediction macroblocks (page 7, lines 9-22).

In yet another aspect, the frame analysis system determines a plurality of predicted frames that reference the current video frame. The identification system identifies a plurality of skippable regions. A final skippable region is determined as a cross set of each of the identified skippable regions (page 7, lines 6-8).

VI. GROUNDS FOR REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-24 stand invalidly rejected under 35 U.S.C. 102(e) as anticipated by U.S. Patent No. 6,758,540 to Adolph et al. ("Adolph").

VII. ARGUMENT

Rejection of claims 2 and 3

Claim 2 recites, ". . . a system for identifying a skippable region in the overlaid area . . . the identification system identifies the entire overlaid area as the skippable region if the current video frame comprises a B picture."

Adolph, by contrast, fails to disclose or suggest the conditionality recited in claim 2.

Instead, Adolph either:

a) decodes the part of the MIS video input signal corresponding to its on-screen display (OSD) if motion exists in the video in the vicinity of the OSD (col. 3, line 66 – col. 4, line 7); or

b) may refrain from decoding the MIS input signal corresponding to its on-screen display at times when motion does not exist in the vicinity of the OSD (col. 4, lines 2-4).

This possible refraining from decoding, at times when motion does not exist in the vicinity of the OSD, is apparently what the Office Action regards as identifying ". . . the entire overlaid area as the skippable region"; however, the present claim 2 recites, ". . . the identification system identifies the entire overlaid area as the skippable region if the current video frame comprises a B picture."

It is unclear to the applicants in what sense the Office Action suggests that the temporal type of the content of the current frame bears on whether or not motion exists in the MIS input signal in the vicinity of the OSD. Although the frequency of B-frames in the initial system design may bear on the likelihood of whether "the current video frame comprises a B picture," such knowledge would still seemingly fail to indicate, with even the faintest bit of reliability, whether or not motion exists in the MIS input signal in the vicinity of the OSD. Nor does Adolph disclose or suggest taking into account the frequency of B-frames, as in the initial system design, in deciding whether or not motion exists in anywhere in the video, much less in deciding whether the motion exists in the vicinity of the OSD.

The Office Action cites to lines 48-60 of column 1 in Adolph for disclosure of "if the current video frame comprises a B picture (Office Action, page 3, item 3, third paragraph); however, the applicants fail to see any disclosure relating to a "B picture."

Instead, the passage cited by the Office Action discusses OSD content pre-stored in a read-only memory (ROM), and Adolph slices any particular one of which is comprised of the pre-stored data or of the MIS input video signal data (see col. 2, lines 5-6).

At least for the foregoing reasons regarding lack of conditionality based on the type of the current frame, "B-picture" or otherwise, in Adolph, Adolph fails to identify ". . . the <u>entire</u> overlaid area as the skippable region <u>if</u> the <u>current</u> video frame comprises a B picture."

Since no Advisory Action has been received, the applicants imagine that perhaps the citation was erroneous, and the Office Action intended to cite to lines 48-60 of <u>column 3</u> in Adolph, rather than column 1, since most of the other citations by the Office Action are to column 3.

This alternative citation by the Office Action relates to processing of the OSD data <u>pre-stored in ROM</u> (col. 3, lines 27(28)-28(29), 33(34), 55, 58). Claim 2 refers to ". . . a current <u>video</u> frame having an overlaid area . . . a skippable region in the overlaid area . . ." Accordingly, it would appear that the Office Action regards the Adolph MIS input <u>video</u> signal, rather than the pre-stored data, to have an "overlaid area" and a "skippable region." Since this alternative citation by the Office Action relates to pre-stored data, it is unclear what relevance it has to ". . . a current <u>video</u> frame having an overlaid area . . . a skippable region in the overlaid area . . ."

Moreover, even if the Office Action envisions the pre-stored data as constituting the "skippable region" of the present claim 2, the specific language of the present claim 2 is still not met. In particular, for slices in the pre-stored data, the "first and last macroblocks of a slice are <u>not</u> skipped macroblocks . . ." (col. 1, lines 56-57). Accordingly, Adolph fails to identify ". . . the <u>entire</u> overlaid area as the skippable region . . ." <u>which language appears explicitly in the present claim 2</u>. Also, conditionality based on the type of the current frame is absent from the Adolph disclosure.

In addition, Adolph does not disclose its OSD as being completely non-encoded (col. 2, lines 1-4), but, even in that case:

a) conditionality based on the type of the current frame is not disclosed; and

b) the claim 2 language ". . . a current video frame having an overlaid area . . . a skippable region in the overlaid area . . ." refers to video, not to pre-stored OSD data from ROM.

In particular, Adolph fails to disclose or suggest, ". . . a system for identifying a skippable region in the overlaid area . . . the identification system identifies the entire overlaid area as the skippable region if the current video frame comprises a B picture."

For at least the foregoing reasons, Adolph fails to anticipate the present invention as recited in claim 2.

Moreover, it would not have been obvious to modify Adolph to resemble the present claim 2, at least because Adolph specifically does not skip the first and last macroblocks of a slice in its OSD and does not contemplate regard to the type of the current frame in the performance of any skipping.

Claim 3 recites, ". . . the identification system identifies the entire overlaid area as the skippable region if none of the sequence of video frames acts as reference frames."

The remarks above, with regard to claim 2, directed to the lack of conditionality in Adolph based on the type of a frame apply here.

In particular, Adolph fails to disclose ". . . the identification system identifies the entire overlaid area as the skippable region if none of the sequence of video frames acts as reference frames."

The Office Action cites to lines 1-15 of column 3 in Adolph; however, the present applicants are unable to glean any apparent relationship between this passage and anything that the applicants could construe as being relevant to the instant discussion.

For at least the foregoing reason(s), the cited reference fails to anticipate the present invention as recited in claim 3.

Rejection of claim 4

Claim 4 is separately patentable, at least due to the following feature.

Claim 4 recites, ". . . calculates a motion vector range . . ."

Although Adolph, in conforming the OSD text/graphic to the surrounding video, assigns the OSD a null motion vector, it is unclear to the present applicants how Adolph can reasonably be deemed to disclose or suggest that Adolph ". . . calculates a motion vector range . . ."

The Office Action cites to lines 60-65 of column 3 in Adolph. This passage discloses that decoding is skipped for pre-stored OSD slice macroblocks, residing in ROM, for OSD slice content that remains unchanged over time. Motion vectors related to the skipped macroblocks are set to zero.

It is unclear, however, by what reasoning this disclosure in Adolph can reasonably be construed as suggesting that Adolph ". . . calculates a motion vector range. . ."

For at least the foregoing reason(s), the cited reference fails to anticipate the present invention as recited in claim 4.

Rejection of claims 6-8 and 17

Claim 6 is separately patentable, at least due to the following feature.

Claim 6 recites, ". . . a motion vector analysis system that examines motion vectors in a predicted frame that references the current video frame in order to identify prediction macroblocks in the overlaid area of the current video frame."

Adolph, by contrast, in the case of motion in the MIS input signal in the vicinity of the OSD, may apply motion vectors to decode a frame for display; but, it is unclear to the applicants in what sense it properly can be said that Adolph "examines motion vectors in a predicted frame that references the current video frame in order to identify prediction macroblocks in the overlaid area of the current video frame."

The Office Action cites to the same passage cited to for claim 4, i.e., lines 60-65 of column 3 in Adolph. However, this passage merely discloses that decoding is skipped for pre-stored OSD slice macroblocks, residing in ROM, for OSD slice content that remains unchanged over time, and that motion vectors related to the skipped macroblocks are set to zero.

It is unclear to the applicants in what sense it properly can be said that Adolph "examines motion vectors in a predicted frame that references the current video frame in order to identify prediction macroblocks in the overlaid area of the current video frame."

For at least this reason, Adolph fails to anticipate the present invention as recited in claim 6.

Claims 7 and 8 depend from claim 6, and are deemed patentable over Adolph for at least this reason.

Claim 17 is a software claim corresponding to system claim 6, and is likewise deemed patentable over the cited reference.

Rejection of claim 10

Claim 10 is separately patentable, at least due to the following feature.

Claim 10 recites:

> a frame analysis system that determines if a current video frame having an overlaid area acts as a reference for future video frames . . .wherein the frame analysis system determines a plurality of predicted frames that reference the current video frame; wherein the identification system identifies a <u>plurality of skippable regions</u>; and wherein a final skippable region is determined as a <u>cross set</u> of each of the identified skippable regions

The Office Action cites lines 30-35, 54-65 of column 3 in Adolph. The present applicants submit these two passages do not provide disclosure of the above-quoted aspect of claim 10. <u>It is not even close</u>. The first passage relates to the header of an OSD slice and structure of the OSD processor. The second passage OSD slice processing when OSD content remains unchanged over time. As merely an example, it is unclear what, in these passages, corresponds to the "cross set" in claim 10. To the best understanding of the present applicants, nothing disclosed in all of Adolph furthers the position taken by the Office Action.

For at least these reasons, the cited reference fails to anticipate the present invention as recited in claim 10.

Rejection of claim 15

Claim 15 is separately patentable from claim 5 and claim 6, incorporating part of the subject matter from both claims.

Claim 15 recites, ". . . calculating a motion vector range for a predicted frame that references the current video frame."

The Office Action cites again to lines 60-65 of column 3 in Adolph.

However, this passage merely discloses that decoding is skipped for pre-stored OSD slice macroblocks, residing in ROM, for OSD slice content that remains unchanged over time, and that motion vectors related to the skipped macroblocks are set to zero.

For at least these reasons, the cited reference fails to anticipate the present invention as recited in claim 15.

Rejection of claim 16

Claim 16 is separately patentable over claim 15, because claim 16 includes the following feature.

Claim 16 recites, ". . . the skippable region comprises the overlaid area less an area defined by the motion vector range."

The Office Action cites to the same part of Adolph it cited to for claim 15, and does not even come close to indicating disclosure in Adolph of anything resembling claim 16. Notably, for example, the motion vector range technique of the present invention is a technique alternative to the prediction macroblock technique of the present invention. If the Office Action is suggesting that one or both of these techniques are

inherent, the present applicants fails to find any support in Adolph for this proposition by the Office Action.

For at least these reasons, claim 16 is deemed to distinguish patentably over Adolph.

Rejection of claim 18

Claim 18 is separately patentable from claim 17, at least due to the following feature.

Claim 18 recites, ". . . the skippable region comprises the overlaid area less the identified prediction macroblocks identified in the overlaid area.

The Office Action cites to the same part of Adolph it cited to for claim 17, and does not even come close to indicating disclosure in Adolph of anything resembling claim 18. Notably, for example, the motion vector range technique of the present invention is a technique alternative to the prediction macroblock technique of the present invention. If the Office Action is suggesting that one or both of these techniques are inherent, the present applicants fails to find any support in Adolph for this proposition by the Office Action.

For at least the above reasons, claim 18 is not anticipated by Adolph.

Rejection of claims 5 and 21

Claim 21 is separately patentable over claim 4, at least due to the second underlined section appearing in the quotation below.

Claim 21 recites:

> calculating a motion vector <u>range</u> for a predicted frame that references the current video frame; and identifying the skippable region as comprising the overlaid area <u>less an area defined by the motion vector range</u>

The Office Action cites, yes, lines 60-65 of column 3 of Adolph.

However, this passage merely discloses that decoding is skipped for pre-stored OSD slice macroblocks, residing in ROM, for OSD slice content that remains unchanged over time, and that motion vectors related to the skipped macroblocks are set to zero.

The Office Action further cites to lines 1-5 of column 4 in Adolph.

However, this passage merely says that Adolph may refrain from decoding the MIS input signal corresponding to its on-screen display at times when motion does not exist in the vicinity of the OSD (col. 4, lines 2-4).

The two passages, alone or in combination, fail to disclose:

> calculating a motion vector <u>range</u> for a predicted frame that references the current video frame; and identifying the skippable region as comprising the overlaid area <u>less an area defined by the motion vector range</u>

For at least these reasons, the cited reference fails to anticipate the present invention as recited in claim 21.

Claim 5 is worded similarly to claim 21, and is likewise deemed patentable over Adolph.

Rejection of claim 22

Claim 22 is separately patentable, at least due to the following features.

Claim 22 recites:

> <u>examining</u> motion vectors in a <u>predicted</u> frame that references the current video frame <u>to identify</u> prediction macroblocks in the current video frame; and identifying the skippable region as comprising the overlaid area <u>less the prediction macroblocks identified in the overlaid area</u>

Adolph, by contrast, in the case of motion in the MIS input signal in the vicinity of the OSD, may apply motion vectors to decode a frame for display; but, it is unclear to the applicants in what sense it properly can be said that Adolph "examining motion vectors in a predicted frame that references the current video frame to identify prediction macroblocks in the current video frame."

The Office Action cites, yet again, to the same passage, i.e., lines 60-65 of column 3 in Adolph. However, this passage merely discloses that decoding is skipped for pre-stored OSD slice macroblocks, residing in ROM, for OSD slice content that remains unchanged over time, and that motion vectors related to the skipped macroblocks are set to zero.

The Office Action further cites to lines 1-6 of column 4 in Adolph.

However, this passage merely says that Adolph may refrain from decoding the MIS input signal corresponding to its on-screen display at times when motion does not exist in the vicinity of the OSD (col. 4, lines 2-4).

For at least these reasons, Adolph fails to anticipate the present invention as recited in claim 22.

VIII. CONCLUSION

In view of the above analysis, it is respectfully submitted that the referenced teachings, whether taken individually or in combination, fail to anticipate or render obvious the subject matter of any of the present claims. Therefore, reversal of all outstanding grounds of rejection is respectfully solicited.

Respectfully submitted,
Dan Piotrowski
Registration No. 42,069

Date: September 15, 2005

By: Steve Cha
Attorney for Applicant
Registration No. 44,069

IX. CLAIMS APPENDIX

2. (currently amended) An optimization system for processing encoded video data, comprising:

a frame analysis system that determines if a current video frame having an overlaid area acts as a reference for future video frames; and

a system for identifying a skippable region in the overlaid area, wherein the frame analysis system examines a picture type of the current video frame, and wherein the identification system identifies the entire overlaid area as the skippable region if the current video frame comprises a B picture.

3. (currently amended) An optimization system for processing encoded video data, comprising:

a frame analysis system that determines if a current video frame having an overlaid area acts as a reference for future video frames; and

a system for identifying a skippable region in the overlaid area, wherein the frame analysis system examines a sequence of video frames, and wherein the identification system identifies the entire overlaid area as the skippable region if none of the sequence of video frames acts as reference frames.

4. (currently amended) An optimization system for processing encoded video data, comprising:

a frame analysis system that determines if a current video frame having an overlaid area acts as a reference for future video frames; and

a system for identifying a skippable region in the overlaid area, further comprising a motion vector analysis system that calculates a motion vector range for the current video frame.

5. (original) The optimization system of claim 4, wherein the skippable region comprises the overlaid area less an area defined by the motion vector range.

6. (currently amended) An optimization system for processing encoded video data, comprising:

a frame analysis system that determines if a current video frame having an overlaid area acts as a reference for future video frames; and

a system for identifying a skippable region in the overlaid area, further comprising a motion vector analysis system that examines motion vectors in a predicted frame that references the current video frame in order to identify prediction macroblocks in the overlaid area of the current video frame.

7. (original) The optimization system of claim 6, wherein the skippable region comprises the overlaid area less the prediction macroblocks identified in the overlaid area of the current video frame.

8. (original) The optimization system of claim 6, wherein the predicted frame includes the overlaid area, and wherein the motion vector analysis system does not examine motion vectors in the overlaid area of the predicted frame.

10. (currently amended) An optimization system for processing encoded video data, comprising:

a frame analysis system that determines if a current video frame having an overlaid area acts as a reference for future video frames; and

a system for identifying a skippable region in the overlaid area, wherein the frame analysis system determines a plurality of predicted frames that reference the current video frame; wherein the identification system identifies a plurality of skippable regions; and wherein a final skippable region is determined as a cross set of each of the identified skippable regions.

15. (currently amended) A program product, stored on a recordable medium, that when executed processes encoded video data, the program product comprising:

means for determining if a current video frame having an overlaid area acts as a reference for future video frames; and

means for identifying a skippable region in the overlaid area, further comprising means for calculating a motion vector range for a predicted frame that references the current video frame.

16. (original) The program product of claim 15, wherein the skippable region comprises the overlaid area less an area defined by the motion vector range.

17. (currently amended) A program product, stored on a recordable medium, that when executed processes encoded video data, the program product comprising:

means for determining if a current video frame having an overlaid area acts as a reference for future video frames; and

means for identifying a skippable region in the overlaid area, further comprising means for examining motion vectors in a predicted frame that references the current video frame to identify prediction macroblocks in the current video frame.

18. (original) The program product of claim 17, wherein the skippable region comprises the overlaid area less the identified prediction macroblocks identified in the overlaid area.

21. (currently amended) A method of processing encoded video data, comprising the steps of:

determining if a current video frame having an overlaid area acts as a reference for future video frames; and

identifying a skippable region in the overlaid area, wherein the identifying step comprises the steps of:

calculating a motion vector range for a predicted frame that references the current video frame; and

identifying the skippable region as comprising the overlaid area less an area defined by the motion vector range.

22. (currently amended) A method of processing encoded video data, comprising the steps of:

determining if a current video frame having an overlaid area acts as a reference for future video frames; and

identifying a skippable region in the overlaid area, wherein the identifying step comprises the steps of:

examining motion vectors in a predicted frame that references the current video frame to identify prediction macroblocks in the current video frame; and

identifying the skippable region as comprising the overlaid area less the prediction macroblocks identified in the overlaid area.